

REMARKS

Upon entry of the present Amendment C, claims 1-16 remain in the application. Of these, claims 1, 7, 11 and 15 are independent. Claims 1, 7, 11 and 15 are amended herein. The amendments are clearly supported in the specification, whereby no new matter is added to the application.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment C is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Amendments Presented

Applicant has amended each of the independent claims 1, 7, 11 and 15 are herein to include the limitations that the performance evaluation comments are automatically selected by the system without requiring any input from an outside source other than the operator. This recitation is fully supported by the original specification at paragraph [018]. Applicant submits that this amending the claims to include this limitation does not change or limit the scope of the invention but more explicitly and definitely claims the subject matter of the invention. Applicant respectfully submits that these amendments are clearly supported in the specification, whereby no new matter is added to the application, since all of the subject matter was expressly or inherently disclosed in the original specification.

Claim Rejections - 35 USC 112

At item 3 of the Office Action, the Examiner has rejected claims 9 and 15 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Examiner contends that the claims contain subject matter which was not described in the

specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner is unable to find support in the original filed specification wherein the selected input devices perform two different sets of functions.

Applicant's Response

Applicant has carefully considered the Examiner's rejection and respectfully traverses such rejection, since the original specification clearly states that the selected input devices perform two different sets of functions. Specifically, at paragraphs [047]-[050] of the original specification, it is clearly stated that upon replay and review of the recorded driving sequence, several of the input devices of the electromagnetic simulator, e.g. the throttle grip 86, the handle bar 78, the gear change pedal 68, and the starter switch 91, are used for manipulation of the screen during the replay of the driving sequence. Thus, these different input devices are not being used for their original purpose during the replay, but instead for a second function which is different than the first function.

Based on the foregoing, applicant respectfully submits that the rejection of claims 9 and 15 under 35 USC 112, first paragraph, has been overcome and it is respectfully requested that such rejection be reconsidered and withdrawn.

Claim Rejections – 35 USC 103

Claims 1-3 and 6

At item 3 of the Office Action, the Examiner rejected claims 1-3 and 6 under 35 USC § 103(a) as unpatentable over Aoki et al. (JP 2002-297017) in view of Adam et al. (US 6,010,403) and Goodyear (US 6,311,041). In the rejection, the Examiner states that Aoki et al. discloses an interactive driving simulation that allows a driver to simulate driving a two-wheeled vehicle, wherein the apparatus is operable to display a virtual environment as a screen image on a display

unit based on a real-time driving routine of a simulated vehicle by the student operator, and wherein said apparatus is capable of recording a driving route sequence and replaying the driving route sequence on said display unit after the real-time driving routine is completed. The Examiner claims that Adam et al. discloses a driving simulation apparatus comprising: a selector which selects selecting performing evaluation comments based on operator input in a simulated driving route sequence, by the driving operation of the operator in a driving route sequence determined in advance in a running route upon simulation apparatus and wherein the display unit comprises a screen which simultaneously display the simulated operating environment and the performance evaluation comments when the driving situation is replayed on the display unit. Further, the Examiner states that Goodyear teaches superimposed written text (col. 3, lines 34-45 and col 7, lines 51-57). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to include a selector as disclosed by Adam, with the announcer's verbal commentary of Aoki, along with the written text, as taught by Goodyear, to learn from the game segment.

Further, at item 14, the Examiner presents a Response to the Arguments presented by the Applicant in Amendment B. In such response, the Examiner states that, although in Adam, audio commentary might not be preferred, there is no recitation in Adam that states that the commentary is limited to audio. As regards Applicant's determination of displaying text of the screen has been provided on the top of page 10, this determination was not found by the Examiner in the disclosure of Adam thereby making the argument moot. In addition, as regards the Applicant's argument that Aoki does not disclose a recorder, which records operator performance data and is capable of replaying specific parts of the driving routine based on the performance data recorded, the Examiner states that Aoki discloses in paragraph 0012, "a storage means to memorize condition data including the run state of said simulation car". Thus, the

Examiner states that Aoki does disclose a recorder, which records operator performance data. In addition, the Examiner mentions that it has been held that the recitation that an element is “capable of” performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Applicant's Response

Applicant has reviewed the Examiner's rejection and respectfully disagrees with such rejection for those reasons as presented in applicant's Amendment B, and further because neither Aoki, Adam, Goodyear or any combination thereof disclose an interactive driving simulation which is capable of providing audio commentary along with superimposed text of such commentary without requiring concurrent input from an instructor.

As stated in Applicant's Amendment B, Adam discloses a video game race car simulation system 10 wherein audio/video commands are selected based on pre-determined interactive events. (col. 5, lines 45-53) and displayed on the current view screen (box 47 of Fig. 4). Adam et al. does not disclose displaying superimposed text of performance evaluation comments based on operator input as disclosed by Applicant's invention, rather it discloses **simply an audio commentary** (col. 6, line 10-12). Applicant disagrees with the Examiner's claim that Adam et al. discloses a display unit which simultaneously displays the simulated operating environment and the superimposed text of performance evaluation comments when the driving simulation is replayed on the display unit, as claimed. Instead, the disclosure of Adam et al. of an audio commentary (col.6, lines 10-12), actually teaches away from the text display as disclosed in Applicant's invention. The audio commentary is preferred (col. 6, line 10) in the video game of Adam et al. because it is less distracting than displaying text on the screen while a user is operating a vehicle in real-time within the game. In contrast, the text display disclosed in

Applicant's invention occurs **during playback of the real-time recording** therefore, text causes no distraction to the operator.

Further, upon review of Goodyear, applicant finds that a system is provided in which a site on a network is accessible to a staff of officials from a sports league to facilitate more consistent and correct officiating of games played under league rules. The site provides links to digitized game segments demonstrative of lessons to be learned from review of the segments. Each of the segments is provided with a comment and/or a question intended to be instructive to the reviewing official. In other words, the comments and/or questions provided with the segments are added by an outside person, i.e. someone who works for the league, and are designed to guide an official when reviewing a play from a game or event different than the segment which contains the comments and/or questions. It is not the system or site which provides the comments and/or questions on the segment which is being replayed from the current game or event.

This is significantly different than the present invention, as currently amended, in which the comments are provided as audio comments, and superimposed text onto the play back of the simulated driving experience. The comments are provided by the system without requiring any input from the instructor or outside source, other than the operator being tested.

Thus, Applicant disagrees that the limitations of claims 1-3 and 6 are made obvious by the combination of Adam et al., Aoki et al. and Goodyear, and respectfully requests reconsideration and withdrawal of the rejections thereof.

Claims 4 and 5

At item 4 of the Office Action, the Examiner rejected claims 4 and 5 under 35 USC § 103(a) as unpatentable over Aoki/Adam/Goodyear in further view of Scott et al. (US 2004/0009812). The Examiner claims that Adam/Aoki/Goodyear disclose all the aspects of

Applicant's invention with the exception of a display unit capable of pausing a replay of the display image or which performs a fast-feeding replay or skipping replay at scenes other than the selected driving situation. The Examiner further claims that Scott et al. discloses a display unit operable to pause the replay of the real-time action and display a still-screen image and performs fast-feeding replay or skipping replay at scenes other than the selected driving situations (fast-forwarding).

Further, at item 14, the Examiner states in response to Applicant's argument that Scott is not analogous art, that Scott is in the field of Applicant's endeavor, and therefore is analogous art.

Applicant's Response

The Applicant disagrees with the rejection of claims 4 and 5 for the reasons presented above with respect to claim 1, from which claims 4 and 5 depend, which are not overcome by any additional teachings of Scott. Particularly, Applicant notes that neither Adam/Aoki or Goodyear disclose displaying performance evaluation comments, either audio or visual, wherein the performance evaluation comments are not determined based on any outside input.

In addition, Applicant respectfully disagrees that it would be obvious for one skilled in the art to combine the teachings of Scott et al. with the disclosures of Aoki/Adam and Goodyear. Applicant respectfully submits that the Scott et al. reference is not analogous art. Scott et al. discloses a system where live video feeds of horse racing can be replayed at the command of a user. Applicant submits that a reference is not reasonably pertinent to a problem with which the inventor was concerned if a person having ordinary skill in the art would not reasonably be expected or motivated to look at the art. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). With regard to Applicant's invention, Applicant respectfully submits that it would not be reasonable to expect a person with ordinary skill to seek out the teachings disclosed in

Scott et al. to attempt to solve the problem of playback of a simulated driver training exercise, where Scott et al. discloses a method for replaying video of recorded horse racing. Therefore, it would not be proper to combine the teachings of Aoki/Adam/Goodyear with non-analogous art such as Scott et al. However, even if the combination would be proper, the combination does not make Applicant's invention obvious, for those reasons as stated above.

Based on the foregoing, applicant respectfully submits that the rejection of claims 4 and 5 has been overcome, and it is respectfully requested that such rejection be reconsidered and withdrawn.

Claims 7, 8 and 10

At item 5 of the Office Action, the Examiner rejected claims 7, 8 and 10 under 35 USC § 103(a) as unpatentable over Aoki (US 5,415,550) in view of Adam/Goodyear/Aoki (JP '017). The Examiner states that Aoki et al. '550 discloses an electromechanical simulator 300 comprising a support frame 302, handle bar 308, pedal mechanism (inherent part of a motorcycle), a plurality of sensors (col. 5, lines 48-55), a processor (10 and/or 11), and a display screen 400 for displaying a simulated operating environment based on a real-time driving sequence controlled by a user. The Examiner further states that the '550 patent fails to disclose an apparatus that is capable of recording specific performance data and displaying the simulated operating environment and performance evaluation comments of a portion of the simulated operating experience where the operators responses fail to perform at a specified level. The Examiner goes on to claim that Adam et al. teaches a display screen that displays the simulated operating environment and performance evaluation comments when a portion of the driving route sequence where the operator has failed to perform at a prescribed level is replayed. The Examiner further states that Aoki et al. (JP 2002-297017) discloses a recorder that records specific performance data, and is capable of recording a specific performance of a real-time

driving simulation and replaying the specific performance after the real-time driving simulation is completed. The Examiner contends that it would have been obvious to one of ordinary skill in the art to combine the recording and playback of Aoki (JP 2002-297017) with the disclosures of the '550 and '403 patents in order to memorize the game state and present the game state to other individuals.

Applicant's Response

The Applicant respectfully disagrees with the rejections of claims 7, 8 and 10, for those reasons as stated above with respect to Adam/Goodyear and Aoki (JP ;017) which are not overcome by any additional teachings of Aoki (US '550). Specifically, applicant respectfully submits that none of the above references, either singly or in combination, discloses the simultaneous display of simulated operating environment and performance evaluation comments, either audio or visual, which do not require any input from an outside source other than the operator being tested.

Further, as stated in Applicant's Amendment B, Applicant respectfully submits that Aoki '550 does not disclose a system of selecting performance evaluation comments based on performance in relation to a specific performance criteria as claimed by Applicants invention, claim 7. Rather, Aoki '550 discloses a system wherein the operator's responses are graded and an evaluation is made SA13. Also, Aoki '550 discloses recording the entire riding simulation (col. 20, lines 46-50).

Based on the foregoing, applicant respectfully contends that the Examiner's rejection of claims 7, 8 and 10 is overcome, and it is respectfully requested that such rejection be reconsidered and withdrawn.

Claim 9

At item 8 of the Office Action, the Examiner rejected claim 9 under 35 USC § 103(a) as

unpatentable over the combination of Aoki et al./Adam et al./Goodyear/Aoki et al. (JP 2002-297017) in view of Copperman (US 5,660,547). In the rejection, the Examiner states that the combination Aoki et al./Adam et al./Goodyear/Aoki et al. discloses the driving simulation apparatus of claim 7, but fails to disclose wherein input devices perform a first set of functions during real-time simulation and a second set of functions during replay of a recorded real-time simulation. The Examiner states that “dual function” input devices are disclosed by Copperman ‘547.

Applicant’s Response

Applicant has reviewed the Examiner’s rejection and respectfully traverses such rejection for the reasons presented above with respect to claim 7, from which claim 9 depends, and further because Applicant disagrees with the Examiner’s characterization of Copperman as teaching a set of input devices with a dual functionality.

As stated in Applicant’s Amendment B, Copperman ‘547 discloses a plurality of input devices 104-112 (Fig. 1), including a turn signal lever 104, dashboard switches 105, brake pedal 106, key ignition 107, gas pedal 108, transmission shifter 110, and steering wheel 112, used by a user to navigate through the simulated environment, as well as rocker switches 182, 184, 186 which permit a user to move within and select between various menu choices and or end a simulation or development sequence. The Applicant submits that in all cases, Copperman uses the input devices 104-112 to navigate through the simulated environment, and in all cases uses the rocker switches 182, 184, 186 to make selections from various menus. Thus, Copperman does not teach using input devices 104-112 to control the replay of the real-time simulation. In fact, Copperman discloses that once the real-time simulation is complete and the abort switch 186 has been manipulated that control of the system (including replay) is performed by the operator via a personal computer 103 which was not used as a control during the real-time

simulation. (col. 13, lines 50-64). Applicant submits that this dual control system requiring two different types of input actually teaches away from the disclosure of claim 9 of Applicant's invention wherein the system can be controlled by one set of input devices regardless of the operating state of the system. Applicant respectfully submits that, as discussed above, teaching away is evidence of non-obviousness. For the reasons put forth above, Applicant disagrees that the limitations of claim 9 are made obvious by the combination of Adam et al./Aoki et al./Goodyear/Aoki et al. (JP 2002-297017) in view of Copperman '547, and respectfully requests reconsideration and withdrawal of the rejection.

Claims 11 and 13

At item 9 of the Office Action, the Examiner rejected claims 11 and 13 under 35 USC § 103(a) as unpatentable over Huston et al. (US 6,146,143) in view of Aoki et al. (US 5,415,550) and Goodyear. In the rejection, the Examiner states that Huston discloses step a) generating a driving simulation course including a plurality of testing situations (col. 2, lines 4-6) and step b) recording the operator's real-time responses to each testing situation on a computer memory (col. 8, lines 37-56) and step d) replaying selected scenes from the simulation course on the display screen (col. 8, lines 40-42). The Examiner claims that Aoki et al. '550 discloses step c) comparing the operator's response to prerecorded base line data (col. 20, lines 51-66) and that Goodyear discloses step d) replaying selected scene from the simulation superimposed with selected performance evaluation comments for each situation in which the operator's responses fail to reach a specified performance level (col. 3, lines 34-45 and col. 7, lines 51-57). The Examiner states that it would have been obvious to one of ordinary skill at the time the invention was made to include replaying, as disclosed by Goodyear, incorporated into Huston/Aoki in order to show the user the problems that were made during riding, as well as, learn from the review of the game segment.

Applicant's Response

Applicant has reviewed the Examiner's rejection and respectfully traverses such rejection for the reasons presented above with respect to claim 7, as it contains substantially the same limitation as recited in step c). Additionally, Applicant disagrees with the rejection of claim 11 for the reasons presented above with respect to claim 1, as it contains substantially the same limitation as recited in step d). Specifically, applicant respectfully submits that none of the above references, either singly or in combination, disclose the simultaneous display of simulated operating environment and performance evaluation comments, either audio or visual, which do not require any input from an outside source other than the operator being tested.

Upon review of Huston, the applicant finds that Huston discloses a vehicle simulation system in which a first user (student) participates in the simulation by operating vehicle control devices 8 in a driving station 2 in response to a sequence of visual images, and in which a second user (instructor) defines one or more traffic events and presents the traffic events during a simulation session to the first user (col. 5, lines 52-67). Huston discloses that the system allows the first user to view his performance during a simulation. Specifically, software presents statistical information pertaining the recently completed simulation session. The statistics may be presented graphically on the monitor 31, and include data such as elapsed time, speed limit conformance, etc. (col. 8, lines 23-37). In addition, Huston discloses that the system allows the second user, such as a driving instructor, to revisit portions of the simulation session either during the course of the simulation or afterward. That is, the second user is permitted to selectively stop and freeze, or replay, the displayed image on the video means 6 so that the second user/instructor may discuss a driving situation with the first user (col. 8, lines 38-56).

This is significantly different than the claimed invention, wherein the performance evaluation comments are generated by the system without the input from any outside source,

such as an instructor or the like,

For the reasons put forth above, Applicant disagrees that the limitations of claim 11 are made obvious by the combination of Huston et al. in view of Aoki et al. and Goodyear, and respectfully requests reconsideration and withdrawal of the rejection. Should claim 11 be found patently distinguishable, Applicant submits that claim 13 which is dependent upon claim 11 is in condition for allowance as well.

Claim 12

At item 10 of the Office Action, the Examiner rejected claim 12 under 35 USC § 103(a) as unpatentable over Huston/Aoki/Goodyear and further in view of Aoki (JP 2002-297017). In the rejection, the Examiner states that Huston/Aoki/Goodyear disclose the method of claim 11, but fail to disclose that the method is performable without requiring input from any person other than the student operator during testing and replay, and considers Aoki '017 to teach an apparatus that is operable without requiring input from any person other than the student operator during testing and replay.

Applicant's Response

The Applicant disagrees with the rejection of claim 12 for the reasons presented above with respect to claim 11, from which claim 12 depends. Additionally, Applicant disagrees with the rejection of claim 12 for the reasons presented above with respect to claim 6 regarding the limitation that the method is performable with input from any person other than the student during testing and replay.

Claim 14

At item 11 of the Office Action, the Examiner rejected claim 14 under 35 USC § 103(a) as unpatentable over Huston/Aoki/Goodyear and further in view of Scott et al. (US 2004/009812). In the rejection, the Examiner states that Huston/Aoki/Goodyear disclose the

method of claim 11, but fail to disclose wherein the replay is paused to display a still-screen image. The Examiner cites Scott et al. as teaching a replay that can be paused to display a still-screen image.

Applicant's Response

The Applicant disagrees with the rejection of claim 13 for the reasons presented above with respect to claim 11, from which claim 13 depends. Specifically, as discussed above in the discussion of claim 1, neither Huston, Aoki, Goodyear, or Scott, taken singly or in combination, disclose wherein the performance evaluation comments are provided both via audio and visual text and wherein the performance evaluation comments are provided by the system without requiring concurrent input from any outside source, such as an instructor or the like. Further, for the reasons presented above with respect to claim 4, applicant does not agree that Scott et al. is analogous art.

Thus, Applicant respectfully submits that the limitations of claim 13 are not rendered obvious by Huston/Aoki/Goodyear and further in view of Scott et al., and respectfully requests reconsideration and withdrawal of the rejection, in light of the present amendments and arguments.

Claim 15 and 16

At item 12 of the Office Action, the Examiner rejected claims 15 and 16 under 35 USC § 103(a) as unpatentable over Adam et al. (US 6,010,403) in view of Aoki et al. (JP 2002-297017), Goodyear, Aoki et al. (US 5,415,550) and Copperman (US 5,660,547). In the rejection, the Examiner states that Adam et al. discloses a real-time driving simulation apparatus with a selector that selects from a pre-stored selection of performance evaluation comments based on operator input with a display the simultaneously displays the simulated operating environment and the performance evaluation comments. Further, the Examiner claims that Adam et al.

discloses playback of a real-time simulation. The Examiner claims that Aoki et al. (JP 2002-297017) discloses recording and replaying the real-time driving simulation. Further, the Examiner states that Goodyear discloses superimposed written text. Still further, the Examiner claims that Aoki et al. '550 discloses input devices operated by the user during the real-time simulation. Lastly, the Examiner claims that Copperman discloses input devices that perform a first set of functions during real-time driving simulation and a second set of functions during replay of a recorded real-time driving simulation.

Applicant's Response

The Applicant disagrees with the rejection of claims 15 and 16 for the reasons previously presented. Specifically, neither Adam, Aoki, Goodyear nor Aoki, taken singly or in combination, disclose wherein the performance evaluation comments are provided both via audio and visual text and wherein the performance evaluation comments are provided by the system without requiring concurrent input from any outside source, such as an instructor or the like, as required by claim 15. Additionally, Copperman does not disclose a set of input devices capable of performing different a first and second set of functions during real-time simulation and replay respectively as discussed with respect to claim 9 above. Thus, Applicant disagrees that the limitations of claim 15 are made obvious by Adam et al. in view of Aoki et al., Goodyear, Aoki et al. '550 and Copperman and respectfully requests reconsideration and withdrawal of the rejection. Further, Applicant submits that claim 16 which is dependent upon claim 15 will be allowable should the Examiner find that claim 15 is patentably distinguishable over the prior art.

Conclusion

In conclusion, Applicant has overcome the Examiner's rejections of record. While Applicant has considered all of the references of record, it is respectfully submitted that the interactive driving simulation apparatus as defined by the present claims, is believed to be

allowable over all of the prior art of record.

If the Examiner is not fully convinced of the allowability of all of the claims now in the application, Applicant respectfully requests that the Examiner telephonically contact Applicant's undersigned representative to expeditiously resolve prosecution of the application.

Favorable consideration is respectfully requested.

Respectfully submitted,


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